

AMENDMENTS TO THE ABSTRACT:

Please replace the paragraph (Abstract) beginning at page 24, line 1 with the following rewritten version:

ABSTRACT

A scroll fluid machine includes a stationary scroll ~~(21)~~ having a spiral wrap ~~(24)~~ formed on an end plate ~~(23)~~ and a moving scroll ~~(22)~~ having a spiral wrap ~~(24)~~ formed on an end plate ~~(23)~~. A polymer actuator ~~(40)~~ for adjusting the amount of space between the wrap ~~(24)~~ and the end plate ~~(23)~~ is disposed in a recess formed at ~~the~~ a tip of the wrap ~~(24)~~. The polymer actuator ~~(40)~~ changes its shape along ~~the~~ a height of the wrap ~~(24)~~ to adjust ~~the~~ an amount of the space. The polymer actuator ~~(40)~~ also functions as a seal between the end plate ~~(23)~~ and the wrap ~~(24)~~. The recess is formed such that a wall of the recess including an inner circumference surface of the wrap ~~(24)~~ has a thickness different from that of a wall of the recess including an outer circumference surface of the wrap ~~(24)~~.